

## Introduction

Duraglide™ Dry Lubricant is a medical grade, ISO 10993\* tested Polytetrafluoroethylene (PTFE) lubricant coating.

*Duraglide* Dry Lubricant coatings impart ultra-low surface friction and minimize device actuation problems caused by “stacked tolerances” in low-speed, light-load medical device assemblies. *Duraglide* uses a volatile carrier fluid that quickly deposits a thin, uniform, dry, lubricating PTFE film on any surface geometry. *Duraglide* is suitable for use as-applied, or coated parts may subsequently be thermally treated for improved PTFE adhesion and longer service life.



## Product Information

*Duraglide* Dry Lubricant offers important money saving benefits:

- ISO 10993\* tested and certified
- Multiple non-flammable, fast-drying, carrier fluid options
- Long PTFE “hang-time” for excellent coating consistency
- Factory calibrated PTFE content for consistent coating results
- Imparts a low surface coefficient of friction of 0.06
- Simple equipment requirements for high-volume part treatment
- Carrier fluid hostile to bioburden issues
- Compatible with ETO and radiation sterilization processes.
- Non migrating (no silicone)
- Excellent compatibility with metals and plastics
- Minimal solvent odor

*Duraglide* is available in package sizes from a few ounces up to 55 gallon drums; and also as an aerosol spray. Call *MicroCare* Medical for details on your specific requirements.

## Physical & Chemical Properties

Carrier Odor	Slight Ethereal
Coating Odor	None
Coating Coefficient of Friction	0.06
ISO 10993 Tested and Certified	Yes*
Solubility in Water	Slight
% Volatile by Weight (Carrier)	100
% Solids by Weight (Typical)	0.5% - 10.0%
PTFE Particle Size Average Bulk Average Mean	1-15 (microns) 3.7 (microns)
Carrier Evaporation Rate (Ether = 1)	>1
Flash Point, Closed Cup (ASTM D 93) Open Cup (ASTM D 1320-86)	Not Flammable Not Flammable

\* Contact MicroCare Medical for specifics regarding ISO 10993 certification.

## Environmental

All *Duraglide* formulas are accepted by the U.S. Environmental Protection Agency (US EPA) under the Significant New Alternatives Policy (SNAP) program. Contact MicroCare for details related to EU REACH compliance requirements.

*Duraglide* Dry Lubricant formulas are not classified as Hazardous Air Pollutants (HAP) and are not subject to NESHAP regulation. None are SARA Title III Section 313 listed, and none are subject to SARA Title III (EPCRA) reporting requirements.

## Biocompatibility

*Duraglide* Dry Lubricant has been successfully tested to appropriate ISO 10993\* protocols. *Duraglide* is not sold for use on permanently implantable devices of any kind. Contact *MicroCare* for full details.

## Application Methods

All surfaces should be clean and dry prior to application. Normal precautions (safety glasses, etc.) should be used when moving, dispensing, and using *Duraglide* Dry Lubricant.


Application methods include dipping, wiping, brushing or aerosol sprays. A single application is adequate for most uses.

The most cost-effective dipping process uses a single-ump, vapor degreaser style dipping machine engineered for use with *Duraglide*. This machine puts the carrier fluid into a low-temperature “rolling boil” to insure the PTFE particles remain in suspension without settling. It is a highly reliable means of coating parts while reducing evaporative losses of carrier fluid. Contact *MicroCare* for more details.

## Heat Treatment

Heat treatment is not required, but may be used to enhance cosmetics and durability by melting the coating onto the substrate. The process is simple, and involves heating the coated part surface to 305-315 °C (581-600 °F). Maintain the surface temperature of the coated part (not the temperature of the ambient air) at the recommended temperatures for 5 - 10 minutes. The process typically changes the coating appearance from opaque white to translucent and ultimately appears clear and wet. If a white residue remains, buff with a soft cloth after cooling. No further treatment is required.

## Packaging and Availability

Packaging	
Liter <sup>1</sup> - 1 L (Sample Package) 2.5 Lb / 1.13 kg	MCC-XF020L
Steel Gallon <sup>1</sup> - 1 Gal / 3.79 L 10 Lb / 4.54 kg	MCC-XF020G
Steel Pail <sup>1</sup> - 5 Gal / 18.9 L 50 Lb / 22.68 kg	MCC-XF020P
Steel Drum <sup>1</sup> - 55 Gal / 208 L 500 Lb / 226.8 kg	MCC-XF020D
Aerosol - 14 oz (397 g)	MCC-DGF14A
Recycle	

*Note: Products sold by weight, not volume.*

*One-gallon and smaller sample containers are available upon request.*

## Making Your Devices Better

[www.MicroCareMedical.com](http://www.MicroCareMedical.com)

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